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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WEINMAN, SEAN M

ART UNIT PAPER NUMBER

2115

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/623,479

Applicant(s)

TRACY ET AL.

Examiner

Sean Weinman

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 23 is objected to because of the following informalities: Claims 23 refers to "the system of claim 21". Claim 21 is a method, and it is believed claim 23 was intended to refer to the "system" of claim 22 and has been treated as such for the remainder of this office action. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5, 10-15, and 22-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As per claims 1-5, 10-15, and 22-24, "the configuration input selectively coupled with each of the plurality of configuration block" is not clearly understood. It is uncertain how the configuration inputs are selectively coupled because there is nothing indicating a selecting means for configuration inputs or blocks.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

5. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "a command word" on line 3. It is unclear whether this is intended to be the same as or different from a "command word" recited in claim 10 line 4. Additionally, claim 21 recites the limitation "a data word" on line 3. It is unclear whether this is intended to be the same as or different from a "data word" recited in claim 10 line 6.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being unpatentable over the Applicant's Admission of Prior Art (AAPA).

As per claim 1, AAPA teach the claimed invention comprising:

a configuration word register comprising a plurality of configuration blocks

(Paragraph [0013])

a plurality of configuration inputs selectively coupled with each of the plurality of configuration blocks (Paragraph [0013]);

a plurality of command inputs adapted to independently enable loading of at least one of the plurality of configuration blocks (Paragraph [0020] The examiner is taking the position that at last one of one block encompasses all of the configuration blocks. The AAPA teaches that all of the configuration blocks are loaded simultaneously.), blocks are adapted to simultaneously load configuration data in response to the plurality of command inputs (Figure 2 Reference 220 Clock The AAPA teaches that all of the configuration blocks are loaded simultaneously in response to the clock signal.).

8. Claims 1-5, 10-15, and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Young et al. (US Patent No. 6,526,557).

9. As per claims 1-4 and 22-24, Young et al teaches the claimed invention, comprising:

a configuration word register comprising a plurality of configuration blocks (Col. 4 lines 4-7);

a plurality of configuration inputs selectively coupled with each of the plurality of configuration blocks (Col. 1 lines 63-66 and Col. 4 lines 7-10);

a plurality of command inputs adapted to independently enable loading of at least one of the plurality of configuration blocks, blocks are adapted to simultaneously load configuration data in response to the plurality of command inputs (Col 5 lines 58-62 and Col 6. lines 16-27 and 44-55).

10. As per claim 5 and 15, Young et al teaches the claimed invention, comprising:

a configuration memory adapted to load configuration data from the configuration word register (Col. 2 lines 17-25 and Col. 4 lines 10).

As per claims 11, 12, 21, and 24, Young et al teaches the claimed invention, comprising:

the steps of receiving the command word, receiving the data word, and loading the data word are repeated for a second data word and a second command word designating a second subset (Col. 2 lines 17-25).

11. As per claims 10-14 and 20-22, it is directed to a method for loading configuration data for a configuration word comprised of a plurality of configuration blocks into a programmable device. Since Young et al. teach the claimed system for loading configuration data for a configuration word comprised of a plurality of configuration blocks into a programmable device, Young et al teach the method of loading configuration data in a programmable device.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 6-9 and 16-19 are rejected under 35 U.S.C. 103(a) as being anticipated by Young et al. (US Patent No. 6,526,557) in view of Lesea et al. (US Patent No. 6,496,971).

14. As per claims 6-9, Young et al. teach the invention for the reasons stated above herein. Young et al. do not teach a configuration controller coupled to a configuration mode input responsive to two different configuration mode states, where the configuration controller is adapted to enable loading of the configuration data into configuration blocks by two different mode methods. Specifically, Young et al. teach a system for loading configuration data for a configuration word comprised of a plurality of configuration blocks into a programmable device. One of ordinary skill in the art would have been motivated to look for a teaching for a configuration controller which adapts to enable loading of the configuration data into the configuration blocks by two different methods.

15. Lesea et al. teach another FPGA configuration system reads a configuration mode code that is used to load the configuration data into the FPGA.  
a configuration mode input (Col. 2 lines 58-62), and  
a configuration controller (Col. 2 lines 56-58)  
in response to a first state of the configuration mode input, the configuration controller is adapted to enable the plurality of configuration blocks to simultaneously load configuration (Col.21lines 63-67, Col. 3 line 1) and,  
in response to a second state of the configuration mode input, the configuration controller is adapted to enable loading of configuration data into the configuration word register via an alternate coupling with configuration data (Col. 3 lines 1-7). In summary, Lesea et al. teach a configuration controller which adapts to enable loading of the configuration data into the configuration blocks by two different methods.

16. It would have been obvious to one of the ordinary skill in the art to combine the teachings of Young et al. and Lesea et al. because they both teach systems to load FPGA configuration data into a programmable device. Lesea et al. covers the deficiency of Young et al. by teaching the detail of teach a configuration controller coupled to a configuration mode input responsive to two different configuration mode states, where the configuration controller is adapted to enable loading of the configuration data into the FPGA by two different modes.

17. As per claims 16-19, it is directed to a method for teach a configuration controller coupled to a configuration mode input responsive to two different configuration mode states, where the configuration controller is adapted to enable loading of the configuration data into the FPGA memory by two different modes. Since Young et al. and Lesea et al. teach the claimed system for configuration controller which adapts to enable loading of the configuration data into the configuration blocks by two different methods, Young et al. and Lesea et al. teach the method of a configuration controller which adapts to enable loading of the configuration data into the configuration blocks by two different methods.

### ***Conclusion***

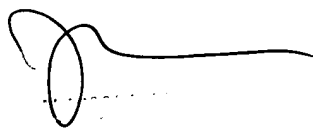
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Weinman whose phone number is (571) 272-2744. The examiner can normally be reached on Monday-Friday from 8:00-4:30.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sean Weinman  
Examiner  
Art Unit 2115

  
A handwritten signature in black ink, consisting of a large loop followed by a horizontal line extending to the right.